

**To:** Chan, Jennifer[Chan.Jennifer@epa.gov]  
**From:** Meadows, Kelly  
**Sent:** Tue 10/21/2014 5:18:58 PM  
**Subject:** RE: PNPS info on off shore intake

Hello—

We've looked over the new scope and have some thoughts. Please see below--we broke the task into a few parts, as it is a complex task. Overall, I am hopeful that this is doable, assuming we do the zero dollar amendment.

Task element	Estimated hours	Assumptions
Determine suitable offshore intake location within Cape Cod Bay. This analysis should consider water depth, benthic habitat, presence/absence of endangered and resident important species, and any other important biological information.	24	Will be a relatively basic analysis using the data from the MA Ocean Plan. The output consist of some graphics and limited accompanying text. If a full memo is required, we'd estimate another 16 hours. If other data layers or analyses are envisioned, that'd be another 8-24 hours.
Consider offshore locations which incorporate both wedge wire screens and velocity cap.	60	Without a very detailed analysis and specific sites, costs may be difficult to estimate; we'll likely provide a range of costs.
Determine costs as well as estimated % reduction in I&E.		
Consider engineering assessment as to the validity of operational concerns (impact to nuclear safety related systems) and the feasibility of retrofit.		
TOTAL	84	

Note that I don't know that the amendment is critical. At the contract level, Greg says that we're in good shape in terms of the \$/hours balance. Being ~40 hours off kilter here wouldn't be a big deal. That said, I think it makes sense for us to do it anyway, just to keep our own house in order...

We're ready to proceed if you are.

Thanks

Kelly

**From:** Chan, Jennifer [mailto:Chan.Jennifer@epa.gov]  
**Sent:** Tuesday, October 21, 2014 10:42 AM  
**To:** Meadows, Kelly  
**Subject:** RE: PNPS info on off shore intake

Kelly,

Please provide support for this task. Attached are the specific on this task. thanks

Jennifer Chan

US EPA, OW, OWM

Water Permits Division

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202-564-3067 (Tues, Wed, Thurs)

**From:** Meadows, Kelly [mailto:Kelly.Meadows@tetrattech.com]  
**Sent:** Tuesday, October 21, 2014 10:27 AM  
**To:** Houlihan, Damien; Chan, Jennifer  
**Cc:** Papadopoulos, George  
**Subject:** RE: PNPS info on off shore intake

Thanks!

**From:** Houlihan, Damien [mailto:houlihan.damien@epa.gov]

**Sent:** Tuesday, October 21, 2014 10:12 AM  
**To:** Chan, Jennifer; Meadows, Kelly  
**Cc:** Papadopoulos, George  
**Subject:** PNPS info on off shore intake

Jennifer and Kelly –

The attached file includes all of the information PNPS submitted regarding an off shore intake. It should be helpful as TetraTech progresses through its analysis.

Let me know if you have any questions. Thanks.

Damien Houlihan, Chief

Industrial Permits Section

Office of Ecosystem Protection

US EPA

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